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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,625	03/07/2002	Marcel Aeschlimann	FRR-12806	5185
40854	7590	05/19/2004	EXAMINER	
RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET WILLOUGHBY, OH 44094-7836			GARCIA, ERNESTO	
			ART UNIT	PAPER NUMBER
			3679	
DATE MAILED: 05/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,625

Applicant(s)

AESCHLIMANN ET AL.

Examiner

Ernesto Garcia

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-32 is/are pending in the application.
- 4a) Of the above claim(s) 20-26, 31 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings were received on 3/8/04. These drawings are acceptable.

Election/Restrictions

Claims 20-26, 31, and 32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 10 filed on 9/15/03. Claims 20-26 are not readable on the elected species 6b. The method of anchoring the joining element in Figure 6b requires that a force and ultrasound be simultaneously applied (see paragraph 041, lines 8-10). Claims 31-32 do not contain a ring of sharp-ended elements and therefore do not read on Figure 6b.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27-29 are rejected under 35 U.S.C. 102(a) as being anticipated by PCT publication, WO98/42988, Aeschlimann et al. (see marked-up attachment).

Regarding claim 27, Aeschlimann et al. disclose, in Figure 7, a combination of a joining element **3.3** and a body **1**. The body **1** comprises a porous material (see English Abstract). The joining element **3.3** comprises a first end portion **A3** and a second end portion **A4**. The first end portion **A3** comprises a thermoplastic material and the first end portion **A3** includes a pointed end **A5** or a cutting edge **A5**. Applicant is reminded that the method of forming the combination is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given limited patentable weight. See MPEP ' 2113.

Regarding claim 28, the joining element **3.3** is pin-shaped and has at least two areas **A7,A17** with different cross-sections **A8,A18**.

Regarding claim 29, one of the cross-sections **A8,A18** is round or polygonal.

Regarding claim 27, Aeschlimann et al., disclose, in Figure 3 (see marked-up attachment to Fig. 3), a combination of a joining element **3** and a body **1**. The body **1** comprises a porous material (see English Abstract). The joining element **3** comprises a

first end portion **A3** and a second end portion **A4**. The first end portion **A3** comprises a thermoplastic material and the first end portion **A3** includes a pointed end or a cutting edge. Applicant is reminded that the method of forming the combination is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given limited patentable weight. See MPEP ' 2113.

Regarding claim 28, the joining element **3** is pin-shaped and has at least two areas with different cross-sections **A20, A21**. One cross-section is smaller than the other cross-section, thus different.

Regarding claim 29, one of the cross-sections **A20,A21** is round or polygonal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over PCT document, WO98/42988 (Aeschlimann et al., see marked-up attachment), in view of Japanese patent, JP-5-245,941.

Regarding claim 30, Aeschlimann et al., as discussed above with respect to Figure 3, fails to disclose at least one of the areas **A20** comprising energy-directing elements in the form of axially-extending ribs. The Japanese patent teaches in Figure 3 at least one of the areas **1** comprising energy-directing elements in the form of axially-extending ribs (see Fig. 3B). The English abstract does not specify the reason for placing ribs in at least one of the areas. However, it appears that placing the ribs prevents, as a safety feature, the pin to be removed from the joining element in case an ultrasound joint fails. Therefore, as taught by the Japanese patent, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include at least one of the areas comprising energy-directing elements in the form of axially-extending ribs in order for the pin to remain in the joint in case the ultrasound joint fails.

Response to Arguments

Applicant's arguments with respect to claims 27-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 703-308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script that reads "Daniel P. Stodola".

E.G.

May 3, 2004

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

Attachment: two marked-up copies of PCT document, WO-98/42988.

WO 98/42988

FIG 7



